

CLAIMS

1. A torque-to-thrust apparatus including a one-way friction torque-transmitting mechanism comprising:

a rotary input member operable in a forward and reverse direction;

5 a linear output member;

torque-to-thrust means disposed between said rotary input member and said linear output member for transmitting rotary motion of said input member to linear motion of said output member;

a stationary component;

10 a mechanical diode disposed adjacent said stationary component and being responsive to said rotary input member to permit free rotation in a first direction;

a friction means disposed between said stationary component and a member of said mechanical diode to hold said mechanical diode member stationary to inhibit the reverse rotation of said rotary input member in a
15 second direction until a predetermined rotary force is present at said rotary input member in said second direction.

2. The torque-to-thrust apparatus including a one-way friction torque-transmitting mechanism defined in Claim 1 further comprising:

said mechanical diode having an inner race and an outer race; and

said friction means comprising a plate member disposed between
5 said outer race and said stationary component.

3. The torque-to-thrust apparatus including a one-way friction torque-transmitting mechanism defined in Claim 1 further comprising:

said mechanical diode having an inner race and an outer race;

said friction means comprising a plate member disposed between
 5 said inner race and said stationary component.

4. The torque-to-thrust apparatus including a one-way friction
 torque-transmitting mechanism defined in Claim 1 further comprising:

said friction means comprising a plate member secured to said
 stationary component adjacent said member of said mechanical diode.

5. The torque-to-thrust apparatus including a one-way friction
 torque-transmitting mechanism defined in Claim 1 further comprising:

said torque to thrust means comprising a hydraulic force
 generating means including a master cylinder and a slave cylinder.

6. The torque-to-thrust apparatus including a one-way friction
 torque-transmitting mechanism defined in Claim 1 further comprising

said friction means having a holding force proportional to a thrust
 force in said torque to thrust means.

7. The torque-to-thrust apparatus including a one-way friction
 torque-transmitting mechanism defined in Claim 1 further comprising:

said friction means having a substantially constant holding force.